

Keith Steward, Ph.D.

Senior AI & Cloud Infrastructure Executive | AI Platform Builder

Boston, MA | 508-318-8035 | keith.steward@gmail.com

[LinkedIn](#) | IntelligentDataWorks.ai | [IDW LinkedIn](#)

PROFILE

AI and cloud-platform executive who turns emerging technologies into production systems, technical roadmaps, and capable engineering organizations. Combines enterprise AI strategy with hands-on distributed architecture, data engineering, model lifecycle, security, and responsible-AI delivery. Built an 11-engineer team and a production platform supporting 70+ AI automations across 20+ workflows; previously advised 200+ AWS enterprises and developed global communities totaling 180+ technical specialists. Brings the judgment to align infrastructure, product, engineering, operations, and customer requirements around measurable platform outcomes.

SELECTED QUALIFICATIONS

- **AI Strategy & Product Roadmaps:** portfolio priorities, platform architecture, emerging-technology evaluation, productization, adoption, and measurable outcomes
- **Cloud & Distributed Infrastructure:** AWS architecture, distributed systems, data lakes, scalable pipelines, workload orchestration, APIs, reliability, and cost controls
- **AI & Data Engineering:** machine learning, NLP, Generative AI, forecasting, TensorFlow, SageMaker, data engineering, model evaluation, and MLOps
- **Executive & Organization Leadership:** engineering-team building, manager development, mentoring, executive communication, customer requirements, partnerships, and delivery governance
- **Responsible Production AI:** security, privacy, compliance, model transparency, bias and drift controls, auditability, observability, and human oversight

PROFESSIONAL EXPERIENCE

Technical Co-Founder & CEO | Intelligent DataWorks | Boston, MA | Aug 2023 to Present

Own AI strategy, product roadmap, architecture, engineering, and cloud operations for a production enterprise-AI platform while remaining hands-on in development.

- Architected and built the reusable AssistX platform using Python, FastAPI, PostgreSQL/PGVector, LLMs, RAG, AI agents, LangChain, LangGraph, APIs, workflow orchestration, evaluation, and AWS services.
- Recruited, trained, and led 11 AI engineers through Agile delivery while retaining direct accountability for architecture, coding, infrastructure, security, release management, and operational reliability.
- Delivered the initial production platform within eight months; it now supports 70+ AI automations across more than 20 workflows and accelerates selected work by up to 50x.
- Evaluated frontier and open-weight models, designed model-routing and cost controls, and established guardrails through automated evaluation, controlled prompts, input validation, and prompt-injection protections.
- Initiated strategic acquisition discussions regarding IDW's AI platform as part of a planned transition to a senior AI/engineering leadership role.

Senior Director of Engineering | SuccessKPI | Remote | Jun 2022 to Aug 2023

Built engineering capability for an AI-powered workforce-management product within a cloud contact-center analytics platform.

- Recruited and led 10 engineers and one manager across architecture, forecasting, optimization, scheduling, analytics, quality, delivery, and annual performance accountability.
- Translated product requirements into AWS architecture, algorithms, data flows, APIs, work breakdown, CI/CD, automated deployment, and iterative releases for enterprise customers.
- Designed machine-learning forecasting and operations-research optimization capabilities integrated with Amazon Connect, Genesys, and Talkdesk, delivering the first production release within 14 months.

Senior Director, Data Analytics & Operations | TriMark USA | Mansfield, MA | Aug 2021 to May 2022

Owned enterprise data and analytics modernization for a \$1B+ organization integrating 11 acquired businesses and heterogeneous ERP systems.

- Defined and secured executive support for an AWS data-platform roadmap spanning more than 50 use cases across Finance, Supply Chain, Marketing, Sales, and Operations.
- Upskilled an initial four-person analytics group and expanded it into a seven-member AWS engineering organization with hiring, mentoring, budget, risk, roadmap, and delivery responsibility.
- Delivered the company's first data lake within seven months, automating nightly ingestion, cataloging, consolidation, and normalization and reducing cross-ERP reporting from two months to one day.

Technical Lead, Cloud Data Privacy & AI Governance | MassMutual | Boston, MA | Nov 2020 to Aug 2021

Established cloud-native engineering patterns across five Data Privacy, AI Governance, and Responsible AI initiatives.

- Led architecture and implementation for Privacy Rights Management, enterprise metadata, governance APIs, and policy automation using secure AWS serverless and managed-service patterns.
- Advised the AI Governance & Ethics organization on model inventory, transparency, bias, drift, monitoring, human oversight, auditability, and SageMaker-based MLOps controls.
- Delivered MassMutual's first cloud-native privacy-rights platform within eight months, automating approximately 90% of a formerly manual workflow addressing CCPA, CPRA, and GDPR requirements.

VP of AI/ML | NorthBay Solutions | Boston, MA | Jan 2019 to Nov 2020 | (Role ended in company-wide COVID layoff).

Recruited out of AWS by the NorthBay Solutions CEO to establish a new AI/ML practice and reusable cloud-data capability.

- Proposed an AWS Data Lake and ML Accelerator, built the initial full-stack platform hands-on, and directed 18 offshore engineers toward customer demonstrations and repeatable delivery.
- Advised enterprise customers on AI and data strategy, scalable AWS architecture, data lakes, knowledge graphs, pipelines, APIs, security, and production machine-learning implementation.
- Partnered with the CEO and product leaders to translate customer requirements into roadmaps, differentiated technical capabilities, architecture choices, and execution plans.

Senior Specialist Solutions Architect, AI/ML & Big Data | Amazon Web Services | Boston, MA | May 2015 to Dec 2018

Helped enterprises and AWS technical teams adopt machine learning, distributed analytics, AI services, and scalable cloud architecture.

- Advised 200+ enterprise customers on AI strategy, SageMaker, TensorFlow, NLP services, EMR, Spark, data lakes, distributed processing, production architectures, and secure cloud adoption.
- Founded and led global AWS technical communities for Big Data and AI/ML, developing more than 180 specialists through standards, workshops, mentoring, technical assets, and hands-on demonstrations.
- Created 170+ technical enablement assets, trained 180+ Solution Architects, delivered 50+ presentations, and contributed to AWS Big Data and AI/ML certification examinations.
- Built a SageMaker and TensorFlow forecasting hackathon for Morgan Stanley data scientists and developed an early intelligent-agent architecture presented at AWS re:Invent.

EARLIER RELEVANT EXPERIENCE

- Director of Software at Dimensional Photonics: led a five-engineer team and one manager while building a fault-tolerant AWS/Cassandra platform for an FDA-cleared connected dental product.
- Director of Cloud Development at CambridgeSoft: managed managers within a 23-person organization and led architecture and commercial delivery of a cloud-enabled scientific notebook product.
- Earlier applied-AI work includes BioWizard, a 400-rule genomic drug-target system, and Ingenuity Pathway Analysis, which became a globally adopted commercial bioinformatics product.

EDUCATION & RECOGNITION

Ph.D., Molecular Biology / Microbiology & Immunology, University of Western Ontario. Canadian Medical Research Council Post-Doctoral Research Fellow. AWS ML Elite Gold and Platinum; AWS re:Invent Rockstar; named inventor on multiple patents.

TECHNOLOGIES

Artificial Intelligence • Machine Learning • Data Science • NLP • Generative AI • LLMs • AI Agents • RAG • AI orchestration • model evaluation • MLOps • Responsible AI • AI Governance • Python • TensorFlow • Amazon SageMaker • AWS • Amazon EMR • Spark • PySpark • S3 • Glue • Athena • Redshift • Lambda • Step Functions • EventBridge • FastAPI • REST APIs • PostgreSQL • PGVector • Cassandra • data lakes • data pipelines • distributed systems • Docker • Kubernetes • CI/CD • AWS CDK • Linux